P-20 Report on Teacher Effectiveness: Policy Priorities to Increase Teacher Effectiveness

Introduction

We face a crisis in our public schools. The National Assessment of Educational Progress indicates that 32 percent of 4th graders in Illinois are proficient in reading and only 33 percent of 8th graders are proficient in reading and math.¹ Less than three-fourths (74 percent) of Illinois students graduate from high school, with significantly lower graduation rates for low-income and minority students.² Further, ACT data indicates that only 47 percent of Illinois students graduate from high school ready for college-level work in reading, 40 percent are ready for college-level math, and only 20 percent are ready for college-level science.³ Altogether, these statistics tell the story of a school system that is not preparing students to be college and career ready in the 21st century.

While the situation is urgent, there is clear evidence that this is a solvable problem. For example, there are dozens of schools in Illinois and several hundred schools around the country that have achieved "90/90/90" status. These are schools where 90 percent of students are low-income, 90 percent of students are from minority backgrounds, and 90 percent of students are meeting or exceeding grade level standards.⁴

When taking on the hard and complicated work of improving our schools, there are many important factors to consider and address. We believe that we can make significant improvement in all grades and contents by focusing on the most important school-based factor – teacher effectiveness.⁵

We know that great teachers are the key to student success, but we miss critical opportunities to ensure that we have strong teachers in every classroom. We approach teacher recruitment, preparation, and hiring in a way that yields beginning teachers who are not set up for success. We fail to meaningfully evaluate and support our teachers so that teachers do not have a clear understanding of their performance – their strengths and

¹ National Assessment of Educational Progress, 2009

² Chicago Public Schools, 2010; In Chicago, for example, where 85% of students qualify as low-income and nearly 1/3 of school-age children in the state go to school, the graduation rate is just over 50%.

³ American College Testing Program, 2009

⁴ Center for Performance Assessment, 2005

⁵ Rivkin et al., 2005; McKinsey & Company, 2010

areas of development – and do not receive support that consistently helps them improve. We do not have strong practices in place to retain our strongest teachers and exit chronic low-performers. And, teachers are often situated in challenging work cultures, where they don't have strong relationships with their peers or administration. Combined, these missed opportunities – the teacher human capital practices and the school climate and culture of our schools – lead to significant gaps in teacher performance.

We start with three basic beliefs. First, strong teachers lead to strong student outcomes.⁶ Second, teachers cannot be seen or understood in isolation from the system they work in. Teachers are deeply affected by the quality, capacity, and culture of the system they inhabit. Third, there are three essential human capital priorities that are strongly linked to the overall strength and performance of our teaching force: 1) teacher recruitment, preparation, and hiring; 2) teacher evaluation and development; and, 3) teacher engagement and retention.

In the current climate, where education policy questions have become so polarized, it's important to note that we do not seek to assign blame or scapegoat any party. Specifically, we do not blame teachers for problems with teacher effectiveness because we recognize that teaching practice is the product of individual skill and effort <u>and</u> systems and communities of support. Thus, responsibility for improvement lives with teachers, administrators, school support personnel, district leaders and their teams, preparation programs, and state leaders and policy-makers. Our goal in this paper is to introduce a simple framework for understanding the contributing factors to teacher effectiveness and where we are missing opportunities to improve teacher performance. We hope this simple framework and the accompanying dashboard will provide the foundation for consistent focus and steady progress on the three core areas of our human capital practices as well as school culture and climate.

We now turn to a review our state's teacher human capital practices – our performance in teacher selection, preparation, and hiring, teacher evaluation and support, and teacher retention. We follow our discussion of core human capital practices with a discussion of the role of school culture and climate. We close with some policy recommendations and a proposal to create a human capital performance dashboard, which would provide an annual report of key metrics and indicators of the efficacy of our human capital practices. This dashboard also seeks to bring out key elements of the teacher experience so that we can understand the ways in which professional relationships and school culture are impacting teacher performance and retention outcomes.

Section I: Teacher Recruitment, Preparation, and Selection

Successful leaders in many contexts note the critical nature of hiring decisions. Who we hire, they say, is one of the most important decisions we make.⁷ Yet, in our public schools, we have a misaligned and broken approach to teacher recruitment, preparation,

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⁶ The New Teacher Project, 2010

⁷ Buckingham & Coffman, 1999

and hiring, such that we often end up with beginning teachers who lack the requisite knowledge, skills, and mindsets to succeed in their classroom context.

There are three critical stages that lead to teacher selection decisions in Illinois: teacher recruitment and preparation program admissions, teacher preparation, and teacher certification and hiring. We discuss these three stages in turn.

There are two basic problems with our current approach to teacher recruitment in Illinois. First, there is not adequate focus on recruiting the strongest high school and college seniors into schools of education. The top performing education systems in the world – Singapore, Finland, and South Korea – pursue what McKinsey calls a "top-third" strategy. That is, they recruit 100 percent of their teachers from the top-third of high school graduates. By contrast, in the United States, we only recruit 23 percent of teachers from the top-third and this figure drops to just 14 percent for schools serving low-income students. These trends apply to Illinois as well, where the average ACT score of teachers is 21 and drops to 19.2 in Chicago.

The second basic problem with our approach to teacher recruitment is the lack of alignment to a predictive, research-based admissions model. Preparation programs across the state have varied admissions criteria, some more rigorous than others, but none is based on research-based set of predictive criteria. Aggregate data from top performing systems indicates that academic capability is one important predictor of success in the classroom, but, beyond that, we have little common, research-based understanding of the qualifications and characteristics of candidates who will go on to become effective teachers. Until we are able to develop such a model, our approach to recruitment and admissions will continue to fall short.

In recent months, there's been significant discussion and controversy surrounding the State Board's decision to raise the pass score on the Basic Skills Test and the impact of this decision on the diversity of the pool of candidates who become eligible to teach. For the September administration of the Basic Skills, for example, we saw the overall pass rate drop from 85% to 22%. For African-American candidates, the pass rate dropped to 3%, and, for Latino candidates, the pass rate dropped to 7%. We believe it's important and necessary to raise the academic capabilities of teachers entering the classroom. At the same time, we believe that building a diverse teaching force is critical to our long-term success. Thus, we encourage the State Board to pursue policies and initiatives that allow us to increase both the academic strength and diversity of our teaching force over time.

We have a large and diverse group of teacher education programs in Illinois. Some programs are exemplary, but many have significant shortcomings. We see three important patterns. First, there is considerable inconsistency between and among programs in both design and execution. Second, coursework is not sufficiently focused

⁹ Illinois Education Research Council, 2008

⁸ McKinsey & Company, 2010

¹⁰ McKinsey & Company, 2010

or aligned to the critical day-to-day work of teaching. Rather, some courses and many assignments are overly theoretical or lack practical application. Third, student teaching experiences are not maximized. In some cases, the design and set up is strong, but teacher candidates are not paired with exemplar teachers. In other cases, the design and performance expectations of the experience are not strong, as candidates simply observe and then take on more responsibility over time without consistent management from the prep program of a teacher candidate's ability to demonstrate proficiency in core skills. Consistent with the National Council for Accreditation of Teacher Education report issued in November 2010, we believe that clinical practice or student teaching experience, is a critical area for focused improvement in the years ahead.¹¹

These findings regarding our preparation programs point to the need to link teacher outcomes to the various providers, so that we can ascertain the effectiveness of prep programs across the state and zero in on and learn from the strongest programs. Specifically, we should track student achievement outcomes, teacher evaluation results, teacher retention, and teacher promotion into leadership positions for the various prep programs across the state.

The third and final stage that leads to teacher selection decisions is teacher hiring and there are two steps in the hiring process in Illinois. First, a teacher candidate must gain certification to be licensed to teach in the state. Second, a teacher candidate must be hired by a given school principal or district human resources department. The first process is centralized and the second process is de-centralized, as hundreds of individual districts and thousands of individual school leaders are empowered to make independent hiring choices from the pool of certified candidates. We believe this is as it should be, but there is significant room for improvement in the centralized state certification process.

Certification should be a powerful indication of an ability and likelihood to succeed as a teacher. Yet, at present, there is little evidence to suggest that the things we assess in the certification process are actually predictive of success in the classroom. Foremost, we require the successful completion of teacher education courses in a variety of domains, but we lack evidence that success in coursework is tantamount to strong preparation.

Our goal should be that certification is highly predictive of success in the classroom, as measured by an ability to improve student learning and teacher practice. In order to gain certification, a candidate should need to demonstrate strength across a broad set of teaching competencies that are linked to strong student outcomes. We should look at competencies in three major categories: 1) academic capability and content knowledge, 2) knowledge and internalization of key teaching practices (including planning, execution, and reflection), and 3) demonstration of dispositions and mindsets that are predictive of success (e.g. resilience, empathy, and high expectations of students from all backgrounds). Using a series of pilots and existing research, we should build a selection model based on the 5 – 10 competencies that matter most. This should be backwards engineered from a careful study of the characteristics of highly effective teachers. We

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¹¹ National Council for Accreditation of Teacher Education, 2010

should then develop assessment tools that allow us to fairly and accurately assess strength in the key areas. And, finally, we should design a certification application and review process that gives applicants fair and thorough consideration.

Section II: Teacher Evaluation, Support, and Development

High performing organizations set clear expectations for staff members, give explicit, robust, and frequent performance feedback to staff members, and provide significant opportunity and support for staff members to grow and improve over time in ways that amplify their strengths and address their weaknesses. Further, these components – from evaluation to professional development – are aligned and integrated, such that development opportunities help staff members improve areas of strength that are critical to success in their role and/or address areas of weakness that are necessary for success. These are core attributes of a strong performance management system and they are foundational to success in many organizational contexts, including schools. ¹³

Our schools and school systems, for the most part, do not have an effective approach to evaluation and teacher development, and these core elements are not substantially integrated.

At present, our teacher evaluation system is largely broken. "The Widget Effect," a 2009 report by the New Teacher Project, studied evaluation practices in three of our largest districts (Chicago, Elgin, and Rockford) and found a system that failed to identify and record meaningful differences in teacher performance. Ninety-four percent of teachers during the period studied received ratings of "excellent" or "superior" and less than 1% of teachers were rated "unsatisfactory." The effect of such inflation and lack of variation is "institutional indifference to variations in teacher performance." As a result of this indifference, strong performance is not recognized, poor performance is not addressed, and teachers do not receive feedback that helps them learn and develop. 14

In our current system, principal discretion – through ratings of classroom observation and professional conduct – provides the predominant basis for a teacher's rating. In some school contexts, principals communicate clear and robust expectations, which are strongly aligned to student outcomes, but in many schools, performance expectations are not clear or robust, leading the evaluation process and outcome to be arbitrary and subjective. ¹⁵

This reliance on principal discretion and the resulting shortcomings in teacher evaluation points to a systemic capacity gap. In many cases, principals do not have adequate training, support, or bandwidth to plan and execute an evaluation process that is fair, reliable, and helpful and leads to differentiated performance ratings and feedback. Thus, fixing our evaluation system will require not just changing the law and building a new

¹³ The New Teacher Project, 2010

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¹² Buckingham & Coffman, 1999

¹⁴ The New Teacher Project, 2009

¹⁵ Buckingham & Coffman, 1999

model, but also adding capacity at all levels of the system – most importantly, at the principal level and the district level – to plan and execute the evaluation process in schools across the state.

Given the lack of variation in ratings and, even more so, the lack of a strong and clear foundation for performance feedback, our evaluation system for the most part does not provide the necessary foundation for a differentiated approach to professional development. In many places, we lack a strong system for helping teachers identify and define their professional growth priorities, which results in a largely undifferentiated and ineffective approach to professional development in schools and districts across the state. At present, in many places, professional development is a one-size-fits-all monthly session for the faculty of a school. This monthly session is usually delivered by the principal, an outside consultant, or fellow faculty members, who may have exciting learnings or practices to share. While the content may be valuable, it is not aligned to the current developmental needs of the majority of teachers. Thus, professional development sessions can be interesting or un-engaging, but they do not generally help to improve the practices of the majority of teachers.

This lack of integration of evaluation and professional development points to the need for a common definition of effective teaching, a teaching and learning framework. This framework should be a shared definition of the core elements of effective classroom leadership and instruction, from vision-setting, to planning, to classroom management, to instructional delivery, to analysis and reflection. It should provide a foundation for understanding strengths and areas of development in current practice and priorities for improvement.

Within this broad priority of strengthening evaluation and support and integrating them into a seamless system and approach, there is a need to focus disproportionate energy on the evaluation and support of beginning teachers. We know that initial performance powerfully predicts later performance and we know that initial experience sets the tone for the professional expectations and experiences that follow. Across the state, there are varied approaches to induction and mentoring. In some schools and districts, there are strong mentor and coaching programs for first and second year teachers. Yet, in many schools and districts, beginning teachers still feel unsupported. In our broader effort to strengthen and integrate evaluation and support, we must place a major emphasis on getting these elements right for new teachers.

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¹⁶ The New Teacher Project, 2009; In a large and diverse state like ours, there are always exceptions. There are certainly schools that have a strong approach to teacher evaluation and development. The hallmark of these schools is clear and robust performance expectations, clear, consistent and reliable performance feedback, which serves the dual function of telling a teacher how she is doing and helping her to identify her professional growth priorities, and professional development that is tailored to meet the current developmental needs of teachers. In such schools, teachers always know how they are doing, what they are working to improve, and have a plan and opportunities to improve their teaching practice.

¹⁷ Moir et al., 2010

¹⁸ Moir et al., 2010

The public debate over teacher evaluation has, unfortunately, focused primarily on evaluation as a tool for addressing underperformance. It is our belief that a strong evaluation system that is integrated with a substantive and tailored approach to professional development will have a powerful positive impact on the teacher experience. Our current system is actually quite de-motivating and, in many cases, demoralizing for teachers. Expectations are not clear. Feedback is not frequent or robust. And, meaningful development opportunities are scarce. A system where expectations were clear and aligned to a powerful and shared definition of successful teaching, where feedback was concrete, thoughtful, and frequent, where there was a priority on reflection, discussion, and collaboration among teachers, and where there were consistent opportunities for professional growth would, in fact, lead to stronger morale. Yes, chronic underperformance would have consequences, but all teachers would inhabit a truly professional system which afforded our teachers the respect, recognition, and support they deserve.

Section III: Teacher Retention

Given that strong staff members are the most important ingredient to organizational success, high performing organizations work diligently and strategically to engage and retain high performing team members.²¹ At the same time, high performing organizations give clear, consistent, and concrete feedback and provide significant support to help struggling staff members improve. But, if struggles persist, high performing organizations make exit decisions. At a system level, then, the ideal is retention results with three recurring patterns: 1) consistent high performers stay and continue to excel; 2) medium level performers stay and improve over time because they are given feedback and support; and, 3) chronic low performers transition out.²² Taken together over time, these three patterns significantly increase the percentage of strong performers in the organization, which increases organizational effectiveness.²³

As we look at teacher retention patterns in our schools and school systems, we see significant room for improvement. Overall, we retain a high percentage of teachers in the State. For example, we retained 92% of the teaching force from the 2008-2009 school year to the 2009-2010 school year. While high overall retention looks good on the surface, we don't know what types of teachers we are retaining and not retaining because of a lack of variation in performance ratings. Because we do not accurate identify and address underperformance through evaluations, it is very likely that we are retaining more low performers than we should. And, due to the shortcomings of our dominant approach to professional development, it is also likely that we don't see healthy year over year improvement among mid-level performers. Overall, we simply do not have sufficient evidence to tell us that we have healthy retention results, and, given the critical

¹⁹ The New Teacher Project, 2009

²⁰ Buckingham & Coffman, 1999

²¹ Buckingham & Coffman, 1999

²² Phillips & Connell, 2003 ²³ Phillips & Connell, 2003

nature of retention decisions to overall system effectiveness, this is not something we should leave to chance.

The first step we must take is to gather accurate data the current state of teacher retention, so that we can understand who stays and who does not stay. The next step is to understand retention outcomes – why are some teachers staying while others are leaving? This will require a much richer view of the teacher experience in schools across the state.

Section IV: Teacher Experience / School Culture and Climate

We believe that teachers cannot be understood in isolation from the schools and school systems they inhabit. Professional relationships matter a great deal. For example, a teacher's relationship with his or her colleagues and administration will play a significant role in their performance and overall job satisfaction. The school's relationship to parents, families, and the broader community helps set the tone for the school culture and climate. This, in turn, influences many aspects of teachers' experiences in the school, most notably their relationships with their students and their students' families. The overall professional expectations and culture of a school have a profound influence on the teachers who work there. An organized, disciplined, and performance-oriented culture, for example, leads to more organized, disciplined, and performance-oriented teachers. Similarly, a chaotic, disorganized, and punitive school culture produces teachers who are, on the whole, less disciplined, organized, and collaborative. Individual teachers can certainly perform and operate in ways that run counter to the prevailing culture, but this is not the norm because, in any professional environment, there are powerful pressures for individuals to match the culture of the group.

All of this suggests that we need to understand several things about the teacher experience and their school culture in order to gain appropriate perspective on teacher performance and retention. We'll need to understand the degree of clarity teachers have about what's expected of them. We'll need to understand their relationship with their administration – whether or not this is a positive, productive, and trusting relationship – and their relationship to their colleagues. We'll need to determine the extent to which teachers feel a part of a professional community that strives for excellence. And, we'll need to understand the degree to which teachers feel like they have the opportunity to learn and grow at work.²⁷ Additionally, we will need to understand how the school relates to the community and how this impacts the teacher experience and the school culture.²⁸ These factors combined will give us a powerful lens into teacher experience and, in turn, help us understand performance and retention outcomes.

²⁴ Buckingham & Coffman, 1999

²⁵ Bryk et al., 2010

²⁶ Reeves, 2006

²⁷ Buckingham & Coffman, 1999

²⁸ Bryk et al., 2010

Section V: Policy Priorities and Proposed Performance Dashboard

There are critical steps we must take as a state to improve our human capital policies and practices with respect to teacher recruitment and selection, teacher evaluation and development, and teacher engagement and retention.

First, we need to design and implement a predictive selection model that will comprise the foundation of the certification process. Our goal is that by 2015, certification has been overhauled and a new system and process are in place, and we can point to robust research evidence to say that gaining certification indicates a high likelihood of success in the classroom. The model should be tailored for different subjects and environments, such that we have a customized set of competencies we are looking for in every type of teacher, from high school math to pre-k.

While our new selection model is under development, we should focus on increasing the rigor of our academic standards for preparation program admissions and ultimately for certification.

As dictated by the Performance Evaluation Reform Act, we need to overhaul the state's approach to teacher evaluation. We need to design a teacher evaluation system that is based on a powerful and shared definition of effective teaching. A significant component of a teacher's rating should be based on student outcomes data. Further, evaluations should produce concrete and helpful performance feedback throughout the school year, so that teachers have ample understanding and opportunity of their areas for improvement. Given the critical nature of this priority, we believe that the State and other stakeholders should consider an accelerated implementation timeline for the new evaluation system.

We need to integrate evaluation and professional development by linking evaluation and professional development to the same core teaching and learning framework. With shared alignment to a common teaching and learning framework, support and development sessions can be designed to increase proficiency in an identified area of need, such that teachers will truly have the opportunity to improve their practice in the areas that matter.

We also need to design an approach to assess and improve the teacher experience. We need to understand the degree to which teachers have clear performance expectations. We need to measure the degree to which they feel motivated and supported. And, we need to measure the efficacy and perceived efficacy of the support they receive. Toward this end, we need to: 1) closely track trends in individual teach effectiveness over time (based on student outcomes data and performance evaluation rating) to assess efficacy of support and development; and, 2) survey teachers annually to understand various core elements of the teacher experience.

We need to develop a more systematic and strategic approach to teacher retention. Our first step is to understand retention outcomes to assess how we are doing. This will entail

tracking retention results and linking them to several different variables, including (but not limited to) evaluation rating, student achievement results, and years of service.

As we develop a stronger systems for tracking and understanding teacher hiring, teacher evaluation and support, and teacher retention, we should consider strategic experimentation with different forms of incentives to promote outcomes. Such strategies could include increasing initial teacher salaries to attract candidates, giving performance raises or performance bonuses to reward strong results, and significantly increasing salaries for consistent high performers to drive stronger retain this group. Until we have a stronger grasp of system performance across these hiring, evaluation and support, and retention, however, experimenting with these kinds of strategies would be premature because we won't be able to reliably assess their efficacy.

In order to foster greater understanding of our teacher human capital policies and practices and create accountability for change, we recommend that the state be responsible for tracking and reporting on the following metrics annually.

PRIORITY	METRIC
Academic Capability	Average basic skills score and ACT score of new teachers for
of Beginning Teachers	the State and cut by district, area (for districts with more than
	50,000 students), and Title I / non-Title I
Efficacy of Teacher	Student achievement outcomes, teacher evaluation ratings,
Prep Programs in	teacher retention outcomes, and teacher promotion outcomes
Producing Strong	(i.e. raw number and percent of teachers who go on to become
Teachers	department chairs, assistant principals, and principals) for
	teachers from various prep programs across the state
Fair, Robust, and	The raw number and percentage of teachers who receive each
Differentiated Teacher	rating for the State and cut by district, area (for districts with
Evaluation	more than 50,000 students), length of service, and Title I / non-
	Title I
Teacher Support and	The year-over-year improvement in teacher performance, as
Development	measured by student outcomes data, reported for the state and
	cut by district, area (for districts with more than 50,000
	students), length of service, and Title I / non-Title I
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Teacher Retention	The raw number and percentage of teachers who stay in the
	classroom from one school year to the next reported for the state
	and cut by district, area (for districts with more than 50,000
	students), school, evaluation rating category, length of service,
Too show Expanion as /	and academic capability (as measured by the Basic Skills score)
Teacher Experience /	Results of teacher survey on school experience for the State and
School Culture and	cut by district, area (for districts with more than 50,000
Climate	students), school, length of service, and Title I / non-Title I

Note: the survey should gauge several different factors of teacher experience, including, but not limited to, clarity of expectations, motivation, relationship with manager, connect to colleagues, and perception of support.

Conclusion

Our State's student achievement results present a case for urgent and substantial reform. Teachers are the most important part of our school system. Great teachers have the ability to dramatically accelerate student learning and poor teachers can thwart and limit growth. Our most urgent priority is to ensure that we have high performing teachers in every classroom. The question is, *how do we make this happen?*

We believe that great teachers are made, not born. Just like any organizational context, teachers are the product of comprehensive human capital practices, from selection, to evaluation and support, to retention. Teachers are also powerfully influenced by the culture of the school they work in. High performing organizations and high performing schools have strong, strategic approaches to teacher hiring, teacher evaluation and support, and teacher retention, such that they significantly multiply the number and percentage of strong performers over time. However, across our schools and school systems, we see a preponderance of missed opportunities.

Our human capital policies and practices are eminently fixable. Through hard work and shared commitment, we can take clear steps to create a system that attracts, develops, and retains high performing teachers much more effectively. This will, in turn, lead to much stronger student outcomes and better life prospects for our students.

References

American College Testing Program. (2009). *ACT National and State Scores*. Retrieved from http://www.act.org/news/data.html/

Bryk, A.S., Sebring, P.B., Allensworth, E., Luppescu, S., & Easton, J.Q. (2010). *Organizing Schools for Improvement: Lessons from Chicago*. Chicago: University of Chicago Press.

Buckingham, M. & Coffman, C. (1999). First, Break All the Rules: What the World's Greatest Managers Do Differently. New York: Simon & Schuster.

Center for Performance Assessment. (2003). *High Performance in High Poverty Schools:* 90/90/90 and Beyond. Englewood, CO: Reeves, D.B..

Chicago Public Schools. (2010). *School & Citywide Reports*. Retrieved from: http://research.cps.k12.il.us/cps/accountweb/Reports/citywide.html

Illinois Education Research Council. (2008). *Leveling Up: Narrowing the Teacher Academic Capital Gap in Illinois*. (IERC 2008-1). Edwardsville, IL: White, B.R., Presley, J.B., & DeAngelis, K.J.

McKinsey & Company. (2010). Closing the talent gap: Attracting and retaining top-third graduates to careers in teaching. New York: Auguste, B., Kihn, P., & Miller, M.

Moir, E., Barlin, D., Gless, J., & Miles, J. (2010). *New Teacher Mentoring: Hopes and Promises for Improving Teacher Effectiveness*. Cambridge, MA: Harvard Education Press.

National Assessment of Educational Progress. (2009). *The Nation's Report Card*. Retrieved from http://nationsreportcard.gov/

National Council for Accreditation of Teacher Education. (2010). Panel Calls for Turning Teacher Education 'Upside Down,' Centering Curricula around Classroom-Ready Training and Increasing Oversight and Expectations. Retrieved from: http://www.ncate.org/Public/Newsroom/NCATENewsPressReleases/tabid/669/EntryId/125/Panel-Calls-for-Turning-Teacher-Education-Upside-Down-Centering-Curricula-around-Classroom-Ready-Training-and-Increasing-Oversight-and-Expectations.aspx

National Council on Teacher Quality. (2010). *Tomorrow's Teachers: Evaluating Ed Schools*. Retrieved from: http://www.nctq.org/p/edschools/

Phillips, J.J. & Connell, A.O. (2003). *Managing Employee Retention: A Strategic Accountability Approach*. Burlington, MA: Butterworth-Heinemann.

Reeves, D.B. (2006). How do you change school culture? *Educational Leadership*, 64(7).

Rivkin, S.G., Hanushek, E.A., and Kain J.F. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417-458.

The New Teacher Project. (2009). The Widget Effect: Our National Failure to Acknowledge and Act on Differences in Teacher Effectiveness. New York: David Weisberg, J., Sexton, S., Mulhern, J., & Keeling, D.

The New Teacher Project. (2010). *Teacher Evaluation 2.0*. Retrieved from: http://www.tntp.org/index.php/publications/issue-analysis/view/teacher-evaluation-2.0